XXII. *Description of select Indian Plants. By Henry Thomas Colebrooke, Esq. F.R.S. & L.S.*

Read April 15, 1817.

Having had the opportunity, during a long residence in India, of examining some plants, which had not, so far as I know, been previously described, and others which had been but incompletely so, I purpose to submit to the notice of the Linnean Society, in this and successive communications, such of them as appear deserving of remark, either as constituting new kinds, or notable species of previously settled genera.

Under the first head is a plant of which the delineation is here presented under the Indian name; as this seems not unsonorous, nor otherwise objectionable. In general it is desirable to avoid the coinage of new words, and to preserve existing names, whenever they are not too barbarous for admission into the classical nomenclature of botanical science. I propose therefore to retain the Indian term, scarcely altered, for a denomination of the genus; and accordingly to name it *Sabia* from the Hindi *Sabja*.

Under the second head, one of the most remarkable of the plants which will be here offered to the Society's consideration is a species of *Strychnos*, which bears much resemblance to that described and figured by M. Leschenault*, and by him affirmed to be one of two which afford poison used to envenom weapons in

* *Ann. du Mus.* 16. *p.* 479. *pl.* 23.

Java,

Java, and the most deadly of the two which have been there employed for that nefarious purpose. Neither M. Leschenault nor Dr. Horsfield, who has also noticed it*, saw the fructification. But the first of those naturalists has concluded (I presume from the habit) that it is a *Strychnos*. The plant which I take to be nearly allied to it, if not specifically the same, and of which I have examined the fruit, is an undoubted *Strychnos*. It grows in the mountains and forests north and east of Silhet in Bengal; where, from numerous other instances, the flora is known to partake largely of that which belongs to the Malayan peninsula and archipelago. The mountains confining the province of Silhet seem to be the boundary, in the geography of plants, between the hither and remoter India, between the cis-gangetic and trans-gangetic regions.

The specimen of this *Strychnos* was sent to me by Mr. M. R. Smith, who, without being himself conversant with botany, has laboured assiduously in advancing the science by collecting specimens of indigenous plants from countries contiguous to that sequestered province, and by communicating his acquisitions to the botanical garden at Calcutta.

The flowers of this plant have not been seen by me. But the examination of the fruit authorized the pronouncing of it to be a *Strychnos*; which has been verified by Dr. Wallich, the present superintendant of the botanical establishment at Calcutta. It differs from Leschenault's description and drawing, as the leaves are ovate, acuminate; his elliptic, acute. Dr. Horsfield designates the leaves of the Javanese species as in pairs, or pinnate in two or three pairs; egged, spear-shaped, terminating in a long narrow point. Nevertheless, the prominent character of the incrassated tendrils, noticed by Leschenault, raises a surmise that

* *Bat. Trans.* 7.

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the *Har-cuchila* of Silhet may be the same with the *Tieuté* or *Chitik* of Java.

The Bengalese name, which is that of the *Nux vomica* (*cuchila*), with a distinctive epithet (*hár*), shows that the natives of Silhet have remarked the affinity of these Indian species of *Strychnos*. The specimen was received thence with the information that "the plant has medicinal virtues;" but without any intimation of deleterious qualities in the bark or root. The leaves are used externally as suppurative; and the seed internally as a febrifuge. In a large dose, however, it is said to be poisonous.

In this, as in most, if not in all, the species of the genus, the wood, and still more the bark, are intensely bitter. This is eminently the case in the two species first known and described, *S. colubrina* and *Nux vomica*. They are employed in the Indian practice of medicine, especially the bark of the root; which is administered by native practitioners as a febrifuge. Their seeds are used singly, and in conjunction with opium as an adulteration of that drug, for their narcotic efficacy; and are also employed by venders of ardent spirits to augment the intoxicating power of the liquor vended by them.

In the Javanese species, a decoction of the bark of the root has been ascertained by Dr. Horsfield to be a most active poison when internally administered. The soluble matter of the bark appears also to be the efficient part of it as a mortal venom introduced by a wound.

Notwithstanding the seeming contrast of qualities between a medicine and a poison, it is possible that the same substance, which is deadly in a greater quantity, may be salutary in smaller doses: the presumption, therefore, is not conclusive against the identity of the species indigenous in Java and in Silhet.

Another plant now submitted is a species of a genus named

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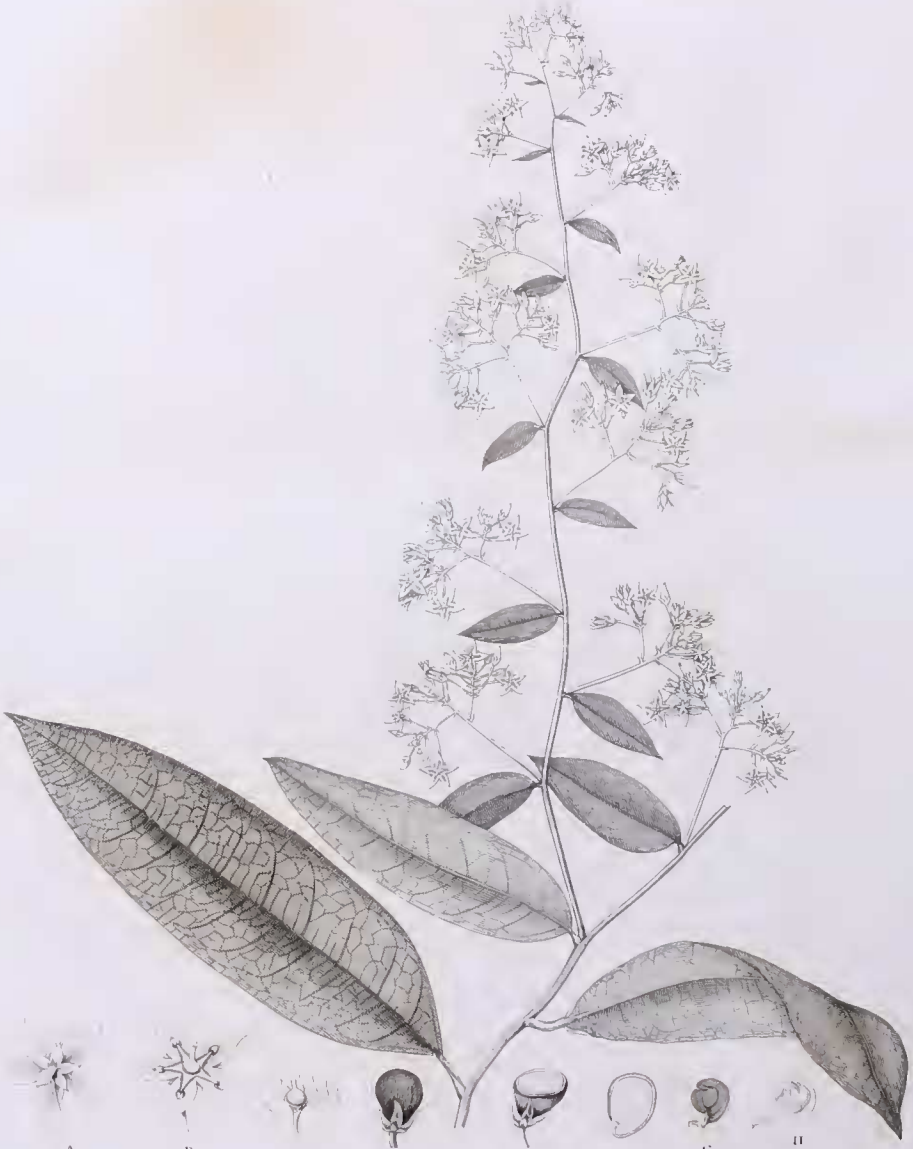
by Gærtner *Pygeum*. Nothing more of his plant was seen by him besides the fruit; and as no marked difference sufficient to discriminate the species is presented in the mature fructification, it is possible that the species now described may be the same which he named *Pygeum zeylanicum*. It seems prudent, however, to give provisionally a distinct trivial name to a plant, which most probably is specifically different.

Two plants of the natural order of the *Asclepiadeæ* have been selected for insertion in the present communication: the first of them, a species of *Dischidia*; only one species of that genus having been hitherto described. It was figured by Rumphius, being native of the Molucca islands. The present sort is indigenous in the north-east of Bengal: and the ingenious botanist, by whom the genus was constituted, has intimated, that India possesses other species of it not yet examined in a perfect state*. Another plant now described is a *Tylophora*; in which genus the specific characters of eight sorts have been established by its author: but none I believe have been delineated by figure.

One more plant of a known genus is here described; and, in deference to authorities of the Linnean school, under the generic name of *Macrolobium*. I should be disposed, however, to follow Lamarck in separating very dissimilar plants, which Schreber has collected into one group. If this be allowed, and Lamarck's generic name be retained, the plant now described may be designated *Vuäpa bijuga*.

* Brown's *Prodromus*.

SABIA.



Salix herbacea

SABIA.

PENTANDRIA MONOGYNIA: pentapetalous, inferior.

Ess. CHAR. *Petals* lanceolate, persistent. *Stamina* straight. *Drupe* superior, reniform, one-seeded. *Embryo* direct, spiral. No *perisperm.*

SABIA LANCEOLATA.

TAB. XIV.

Native of Silhet, where it flowers in October, and bears ripe seed in May.

Beng. (at Silhet) *Sabjá-lat.*

Stem shrubby, scandent, flexuose. *Leaves* alternate, short-petioled, lanceolate, acute, entire, smooth; 4—6 inches long; 1—1½ broad. *Corymbs* axillary and terminal; forming a loose, ovate panicle: primary divisions ternate. *Flowers* numerous, small; green with a slightly-purplish tinge. *Bractes* minute, ovate, acute. *Perianth* five-parted, acute, persistent. *Segments* ovate. *Petals* five, lanceolate, acute, spreading, smooth, persistent. *Filaments* five, flat, subulate, shorter than the petals, inserted at their base. *Anthers* round. *Germ* round. *Style* columnar, short. *Stigma* simple. *Drupe* reniform, pulpy, dark-blue, size of a kidney-bean, one-seeded, sitting on the permanent calyx and corolla. *Nut* or *Pyrene* solitary, unequally two-lobed, attached by the middle of the smaller lobe a little above the base. *Shell* crustaceous, thin, fragile. *Seed* solitary, attached to the navel by a clavate ligament; honey-coloured; spiral, anfractuous (a single chink on one side, and two on the other, answering to plicatures of the cotyledons). *Integument* single, chartaceous. *Embryo* erect, conform to the seed, white. *Cotyledons* almond-fleshy, writhed (being folded one within the other; plaited once longitudinally and thrice transversely). *Scape* dorsal, curved, filiform. *Radicle* conical, inferior.

REFERENCES.

A. B. C. Flower magnified.
D. E. F. Fruit (natural size).
G. Seed in a state of germination (natural size).
H. The same denuded; or embryo.

STRYCHNOS axillaris.

Tab. XV.

Leaves ovate, acuminate. *Tendrils* axillary, thickened. *Berry* oval, one-seeded.

Native of mountainous countries north and east of Silhet in Bengal; where it blossoms in the hot season, and ripens its fruit in the beginning of the rainy season.

Beng. (at Silhet) *Ar-cuchila*, or *Hár-cuchila*.

Stem shrubby, scandent. *Leaves* opposite, short-petioled, ovate, acuminate, three-nerved, smooth, polished. *Tendrils* axillary, thickening above the middle. *Fascicles* axillary, opposite, branched, corymbose, short-peduncled. *Flowers* small, white. *Bractes* two, opposite, ovate, acute, ciliate, persistent. *Perianth* five-cleft. *Segments* ovate, ciliate. *Corol* tubular, smooth, five-toothed. *Teeth* lanceolate, acute. *Throat* bearded with numerous hoary hairs. *Filaments* from the middle of the tube of the corol. *Anthers* oblong, bearded at the base with copious hoary hairs. *Pistil* shorter than the stamina. *Stigma* subcapitate. *Ovary* two-celled, with numerous ovules affixed to a central receptacle. *Berry* elliptico-globular, size of an olive, yellow (pale orange), sitting on the permanent calyx, one-celled (the second being almost obliterated): filled with gelatinous yellow pulp. *Seed* solitary. *Integuments* double, membranaceous. Exterior invested with dense, short hair, to which

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Strychnos axillaris.

Ewarts sculp